

Appl. No. 10/827,088
Docket No. 9606
Reply dated September 10, 2009
Reply to Office Action mailed on June 11, 2009
Customer No. 27752

REMARKS

Claim Status

Claims 1-16 are pending in the present application. No additional claims fee is believed to be due.

Rejections Under 35 USC §103(a)

Claims 1, 2 and 8 have been rejected under 35 USC §103(a) as being unpatentable over Castello (US 4,931,051) in view of Raykovitz (US 5,342,861) and Townsend (US 4,287,153). This rejection is respectfully traversed by Applicants since the combination does not establish a *prima facie* case of obviousness because it does not teach or suggest all of the claim limitations of independent claim 1. Therefore, the rejection should be withdrawn.

The Office Action asserted that Castello teaches a diaper having a backsheet (190), a topsheet (170) and an absorbent core (180). The Office Action further asserted that Castello teaches a color wetness indicator printed onto a surface of a backsheet of the diaper (col 2, lines 30-62) and a coating or varnish over the wetness indicator to prevent premature activation (col. 5, lines 14-21). The Office Action noted that Castello fails to teach that the color wetness indicator is hydrolyzable. The Office relied on Raykovitz as disclosing an absorbent article having wetness indicating agent that is substantially invisible in the dry composition but becomes a vivid color when wet. The Office Action also asserted that Townsend teaches an absorbent article (1) having a water indicating graphics (2) made of a latent color pigment material that undergoes a hydrolytic reaction in response to urine or saline water. The Office concludes that it would have been obvious to one of ordinary skill in the art to substitute the graphics compositions of Raykovitz and Townsend for use as the wetness indicator material in the articles of Castello.

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In order for the Office to show a *prima facie* conclusion of obviousness, M.P.E.P. §2142 requires a clear articulation of the reasons why the claimed invention would have been obvious. Specifically, the Supreme Court in *KSR International Co. v. Teleflex Inc.*, 500 U.S. 398, 82 USPQ2d 1385, 1396 (2007) noted that the burden lies initially with the Office to provide an explicit analysis supporting a rejection under 35 U.S.C. 103. “[R]ejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” The Court in *KSR International* further identified a number of rationales to support a conclusion of obviousness which are consistent with the proper “functional approach” to the determination of obviousness as laid down in *Graham v. John Deere Co.* 383 U.S. 1, 148 USPQ 459 (1966).

Specifically, as previously required by the TSM (teaching, suggestion, motivation) approach to obviousness, one exemplary rationale indicated requires teaching, suggestion, or motivation in the prior art reference that would have led one of ordinary skill to modify the prior art reference to arrive at the claimed invention. Specifically, to reject a claim based on this rationale, the Office must articulate the following: (1) a finding that there was some teaching, suggestion, or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine reference teachings to arrive at each and every limitation of the claimed invention; (2) a finding that there was a reasonable expectation of success; and (3) whatever additional findings based on the *Graham* factual inquiries may be necessary, in view of the facts of the case under consideration, to explain a conclusion of obviousness. The Office has failed to meet its burden under number (1) above, as the cited references fail to show each and every limitation of Applicants’ invention and there is no apparent reason for one skilled in the art to modify the reference to arrive at each and every limitation. It simply would not have been obvious to one skilled in the art to arrive at Applicants’ claimed combinations.

Significantly, Castello discloses a wetness indicator used on absorbent pads such as diapers for signaling the presence of water. Castello teaches that the active component of the wetness indicator is a hydratable salt which undergoes a color change when it transforms from an anhydrous compound to a hydrated compound. (See column 3, lines 37-40). According to the specification, the color change is the result of hydration, i.e. the chemical process of combining with water, where water maintains itself. (See column 4, lines 22-31). In contrast, independent claim 1 recites a wetness indicator comprising a hydrolyzable color composition. That is, the color composition of claim 1 changes color as the result of hydrolysis, i.e. the chemical process of splitting water into proton and hydroxide (water enters the reaction and becomes part of the end products). As a result, the color composition undergoes a chemical reaction so that the graphic changes from invisible to visible to the unaided eye, i.e. the graphic appears. As discussed in the present specification, prior to wetting, the graphic is not visible to the unaided eye, i.e. it is transparent, because it typically assumes the color of the backsheet on which it is printed. (See p. 11). This is an important difference because hydration is usually reversible, while hydrolysis is not reversible.

Moreover, the deficiencies of Castello are not resolved by Raykovitz or Townsend. Raykovitz is directed to a hot melt wetness indicator (pH indicator) that undergoes a color change. However, similar to Castello, the color change is the result of hydration. Irrespective of these teachings, however, the reference fails to teach or suggest a graphic, like Applicant's color composition, that changes from invisible to visible as the result of hydrolysis. There is no mention or teaching by Raykovitz of a wetness indicating agent that undergoes hydrolysis in order to form a graphic that "appears" upon wetting.

Further, it is Applicant's understanding that Townsend is directed to a saline water indicator material comprised of a water insoluble polymeric ion exchange material (for example, cellulosic substrate) chemically bound with a water insoluble polymeric exchanged ion indicator. In addition, Townsend teaches that prior to exposure to saline/urine, the disposable article exhibits a visible color, for example, green when

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viewed from the outward side of the transparent backsheet. (See Ex. 1, col. 14). After exposure to saline/urine, Townsend teaches a visible color change, for example, from green to yellowish-orange. (See Ex. 1, col. 14). Irrespective of these teachings, however, the reference fails to teach or suggest a graphic, like Applicant's color composition, that changes from invisible to visible as the result of hydrolysis. Rather, Townsend teaches an indicator material that changes from one visible color to another visible color in the presence of saline/urine.

References relied upon to support a rejection under 35 U.S.C. 103(a) must provide an enabling disclosure, i.e., they must place the claimed invention in the possession of the public. *In re Payne*, 203 U.S.P.Q. 245 (CCPA 1979). Because the cited combination fails to teach all of the claim limitations of claim 1, the Office Action has not established a *prima facie* case of obviousness and has not placed the presently claimed article in the possession of the public. Since claims 2 and 8 depend directly from claim 1, the cited combination also fails to teach all of their claim limitations. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596 (Fed. Cir. 1988). Therefore, Applicants assert that claims 1, 2 and 8 are nonobvious over the cited combination and are in condition for allowance.

Claim 3 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Castello, Raykovitz and Townsend in view of Timmons et al (US 4,022,211). The deficiencies of the Castello, Raykovitz and Townsend references detailed above are not resolved by Timmons. While Timmons teaches the use of alcohol as a solvent, Applicant finds no teaching by Timmons of a disposable absorbent article as defined by claim 1 and containing a wetness indicator comprising a hydrolyzable color composition that undergoes a hydrolytic reaction resulting in the graphic becoming visible to the unaided eye, i.e. changing from invisible to visible. Since claim 3 depends indirectly from claim 1, the cited combination also fails to teach all of its claim limitations. *In re Fine*, supra. Therefore, Applicant asserts that claim 3 is nonobvious over the cited combination and are in condition for allowance.

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Claims 4 and 5 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Castello, Raykovitz and Townsend in view of Schleinz et al (US 5458590). The deficiencies of the Castello, Raykovitz and Townsend references detailed above are not resolved by Schleinz et al. While Schleinz et al teaches an ink blend comprising n-propyl acetate, Applicant finds no teaching by Schleinz et al of a disposable absorbent article as defined by claim 1 and containing a wetness indicator comprising a hydrolyzable color composition that undergoes a hydrolytic reaction resulting in the graphic becoming visible to the unaided eye, i.e. changing from invisible to visible. Since claims 4 and 5 depend indirectly from claim 1, the cited combination also fails to teach all of their claim limitations. *In re Fine*, supra. Therefore, Applicant asserts that claims 4 and 5 are nonobvious over the cited combination and are in condition for allowance.

Claim 6 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Castello, Raykovitz and Townsend in view of Ito et al (US 5595754). The deficiencies of the Castello, Raykovitz and Townsend references detailed above are not resolved by Ito et al. While Ito et al teaches absorbent color-changing sheets which use polyamides as resins in an impermeable layer, Applicant finds no teaching by Ito et al of a disposable absorbent article as defined by claim 1 and containing a wetness indicator comprising a hydrolyzable color composition that undergoes a hydrolytic reaction resulting in the graphic becoming visible to the unaided eye, i.e. changing from invisible to visible. Since claim 6 depends from claim 1, the cited combination also fails to teach all of its claim limitations. *In re Fine*, supra. Therefore, Applicant asserts that claim 6 is nonobvious over the cited combination and are in condition for allowance.

Claims 7 and 11 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Castello, Raykovitz and Townsend in view of Olson et al (WO 00/76442). The deficiencies of the Castello, Raykovitz and Townsend references detailed above are not resolved by Olson et al. While Olson et al teaches an absorbent article having a changing wetness indicator printed on an inner surface of a backsheet, Applicant finds no teaching by Olson et al of a disposable absorbent article as defined by claim 1 or the method of

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printing defined by claim 11, and containing a wetness indicator comprising a hydrolyzable color composition that undergoes a hydrolytic reaction resulting in the graphic becoming visible to the unaided eye, i.e. changing from invisible to visible. Because the cited combination fails to teach all of the claim limitations of claims 1 and 11, the Office Action has not established a *prima facie* case of obviousness and has not placed the presently claimed disposable absorbent article or method of printing in the possession of the public. Since claim 7 depends from claim 1, the cited references also fail to teach all of its claim limitations. Therefore, Applicant asserts that claims 7 and 11 are nonobvious over the cited combination and are in condition for allowance.

Claims 9 and 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Castello, Raykovitz and Townsend as in view of Polansky, et al. (US 4,249,532; hereinafter "Polansky"). The deficiencies of the Castello, Raykovitz and Townsend references detailed above are not resolved by Polansky. In the Office Actions dated May 26, 2006, October 31, 2006, April 19, 2007, October 4, 2007, December 9, 2008 and June 11, 2009, the Office stated that: "Polansky teaches a seal coat underlying a graphic design." Applicants respectfully disagree with the Office's characterization of the placement of the seal coat as taught by Polansky et al. Specifically, Polansky et al discloses that design 16 is imprinted on an inner side 17 of a polyethylene sheet 13 so as to be visible for the outer side 18. (See column 1, lines 58-61). Further, Polansky et al teaches that after imprinting design 16 a seal coat 24 covers the printed colors. (See column 2, lines 8-10) Thus, the sealing coat of Polansky is disposed over the design rather than underneath, i.e. sheet 13, design 16 and sealing coat 24 disposed over design 16. In contrast, claim 10 recites a varnish coating disposed beneath the color composition so that the varnish coating is between the substrate and the color composition.

Notwithstanding, Applicant finds no teaching by Polansky et al of a disposable absorbent article as defined by claim 1 and containing a wetness indicator comprising a hydrolyzable color composition that undergoes a hydrolytic reaction resulting in the graphic becoming visible to the unaided eye, i.e. changing from invisible to visible.

Because the cited combination fails to teach all of the claim limitations of claim 1, the Office Action has not established a *prima facie* case of obviousness and has not placed the presently claimed disposable absorbent article in the possession of the public. Since claims 9 and 10 depend directly or indirectly from claim 1, the cited references also fail to teach all of their claim limitations. Therefore, Applicant asserts that claims 9 and 10 are nonobvious over the cited combination and are in condition for allowance.

Claim 13 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Castello, Raykovitz and Townsend in view of Perrault, et al. (US 4,717,378; hereinafter "Perrault"). The deficiencies of the Castello, Raykovitz and Townsend references detailed above are not resolved by Perrault et al. While Perrault teaches a method for detecting dehydration of a hydrogel which includes using D&C Red #27, Applicant finds no teaching by Perrault of a disposable absorbent article as defined by claim 1 and containing a wetness indicator comprising a hydrolyzable color composition that undergoes a hydrolytic reaction resulting in the graphic becoming visible to the unaided eye, i.e. changing from invisible to visible, as required by claim 1. Because the cited combination fails to teach all of the claim limitations of claim 1, the Office Action has not established a *prima facie* case of obviousness and has not placed the presently claimed disposable absorbent article in the possession of the public. Since claim 13 depends indirectly from claim 1, the cited references also fail to teach all of its claim limitations. Therefore, Applicant asserts that claim 13 is nonobvious over the cited combination and are in condition for allowance.

Claims 14 and 16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Castello, Raykovitz and Townsend in view of Howell (US 5,389,093). The deficiencies of the Castello, Raykovitz and Townsend references detailed above are not resolved by Howell. While Howell teaches a thermochromatic ink comprising a fatty acid that changes from a solid state to a liquid state when heated, such change effectuating the color change, Applicant finds no teaching by Howell a of a disposable absorbent article as defined by claim 14 containing a wetness indicator comprising a hydrolyzable color composition that undergoes a hydrolytic reaction forming a carboxylic

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acid, and resulting in said graphic becoming visible to the unaided eye, i.e. changing from invisible to visible, as required by claims 14 and 16. Thus, the carboxylic acid is formed after wetting. In contrast, Howell teaches an ink that contains a fatty acid both before and after wetting. In other words, the fatty acid is not formed as part of a hydrolytic reaction. Because the cited combination fails to teach all of the claim limitations of claims 1 and 14, the Office Action has not established a *prima facie* case of obviousness and has not placed the presently claimed disposable absorbent article in the possession of the public. Since claim 16 depends from claim 1, the cited references also fail to teach all of its claim limitations. Therefore, Applicant asserts that claims 14 and 16 are nonobvious over the cited combination and are in condition for allowance.

Claims 12 and 15 rejected under 35 U.S.C. § 103(a) as being unpatentable over Castello, Raykovitz, Townsend and Howell in view of Pierce, et al. (WO 00/76438). The deficiencies of the Castello, Raykovitz and Townsend references detailed above are not resolved by Pierce et al. While Pierce teaches one or more active graphics that when contacted with fluid appear or fade to match the color of the outer cover, Applicant finds no teaching by Pierce of a disposable absorbent article as defined by claim 1 and containing a wetness indicator comprising a hydrolyzable color composition that undergoes a hydrolytic reaction resulting in the graphic becoming visible to the unaided eye, i.e. changing from invisible to visible, as required by claim 1 or as required by claim 14 and containing a wetness indicator comprising a hydrolyzable color composition that undergoes a hydrolytic reaction forming a carboxylic acid, and resulting in said graphic becoming visible to the unaided eye, i.e. changing from invisible to visible, as required by claim 14. Because the cited combination fails to teach all of the claim limitations of claims 1 and 14, the Office Action has not established a *prima facie* case of obviousness and has not placed the presently claimed disposable absorbent article in the possession of the public. Since claim 12 depends from claim 1 and claim 15 depends from claim 14, the cited references also fail to teach all of its claim limitations. Therefore, Applicant asserts that claims 12 and 15 are nonobvious over the cited combination and are in condition for allowance.

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Conclusion

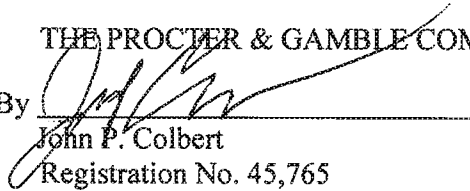
In light of the above remarks, it is requested that the Examiner reconsider and withdraw the rejections under 35 USC §103(a). Early and favorable action in the case is respectfully requested.

This response represents an earnest effort to place the application in proper form and to distinguish the invention as now claimed from the applied references. In view of the foregoing, reconsideration of this application, entry of the amendments presented herein, and allowance of Claims 1 - 16 is respectfully requested.

Respectfully submitted,

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